AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 19 with the following replacement paragraph:

--Previous technical approaches are predominantly based on ceramic compounds of a ~~Perowskite-type~~ Perovskite-type structure of the general formula ABO_3, the piezoelectric properties being manifested in the ferroelectric state. Lead-zirconate titanate ceramics $Pb(Zr_{1-x}Ti_x)O_3$ (PZT), modified by certain additives, i.e., PZT-based ceramics, have proven to be particularly advantageous. Noble metal internal electrodes applied using serigraphic methods are located between ceramic layers manufactured using typical ceramic foil technology. When appropriate additives or dopants are used, PZT-based piezoelectric ceramics have an excellent combination of properties, such as high temperature resistance, a high piezoelectric charge constant, high Curie temperature, low dielectric constant, and low coercive field intensity.--.

Please replace the paragraph beginning on page 3, line 13 with the following replacement paragraph:

--These and other objects of the invention are achieved by a method for manufacturing a low-sintering PZT-based piezoelectric ceramic material, the ions to be added being added in the form of powdered oxides and/or powdered carbonates as starting compounds, mixed together and then calcined to form the piezoelectric ceramic material, wherein after calcining the starting compounds, lithium in ~~ionic~~ salt form is added to the mixture in an amount in the range of 0.01 to 0.1 wt.% in relation to the weight of the PZT ceramic.--.

Please replace the paragraph beginning on page 4, line 4 with the following replacement paragraph:

--It has been found that controlled addition of lithium in ~~ionic~~ salt form in the range of 0.01 to 0.1 wt.% in the case of special PZT compositions, for example those proposed in WO 02/055450 A1, is capable of lowering the sintering temperature of the PZT ceramic by at least 100°C (from 1000°C to 900°C, for example), the electromechanical properties being preserved or even improved in relation to comparable PZT ceramics without such additives. The amount of additive depends on the PbO excess percentage and on the selection of the dopant proportions and

thus on the lead lattice vacancies. The above-mentioned, special PZT compositions proposed in WO 02/055450 A1 may have the formula:

$$Pb_{1-x-(3/2a)-1/2(x-b)}A^1_xA^2_a(Zr_{y(1-x\cdot b-x\cdot z)}Ti_{(1-y)(1-x\cdot b-x\cdot w)})(B^1_bB^2_zB^3_w)_xO_3$$

where A^1 is selected from the group Ca, Mg, Sr, Ba, or their mixtures; A^2 is selected from the group of rare-earth elements, in particular La, or their mixtures; B is selected from the group Nb, Ta, or Sb, or their mixtures; B^2 is Cu or a mixture of Cu with at least one element selected from the group Zn, Ni, Co, or Fe, and B^3 is Fe, under the condition that the following applies to a, b, c, x, y, z, and w:

$0.001 \leq a \leq 0.05$
$0.05 \leq b \leq 0.90$
$0.005 \leq x \leq 0.03$
$0.5 \leq y \leq 0.55$
$0.05 \leq z \leq 0.90$
$0 \leq w \leq 0.5$.

Alternatively, if PbO is added to the starting compounds in stoichiometric excess, so that the PZT ceramic obtained has a non-stoichiometric overall composition, the above-mentioned, special PZT compositions proposed in WO 02/055450 A1 may have the formula:

$$Pb_{(1+c)-x-(3/2a)-1/2(x\cdot b)}A^1_xA^2_a(Zr_{y(1-x\cdot b-x\cdot z)}Ti_{(1-y)(1-x\cdot b-x\cdot w)})(B^1_bB^2_zB^3_w)_xO_3$$

where A^1, A^2, B^1, B^2, B^3 are as above and the following applies to a, b, c, x, y, z and w:

$0.001 \leq a \leq 0.05$
$0.05 \leq b \leq 0.90$
$0 \leq c \leq 0.04$
$0.005 \leq x \leq 0.03$
$0.5 \leq y \leq 0.55$
$0.05 \leq z \leq 0.90$
$0 \leq w \leq 0.5$.